WO 2005/077296 PCT/GB2005/000418

13

CLAIMS

5

25

30

1. A method of manufacturing a fixed denture (18,58) comprising:

identifying the surface of a tooth preparation (110);

relating the identified surface to a near net shape version of the denture (120); and

- altering the near net shape version (130) to produce a denture having an inner profile which substantially replicates the surface of the tooth preparation (140).
- 15 2. A method according to claim 1 wherein, the inner profile includes an offset (36).
- A method according to claim 1 or claim 2 wherein, the surface of the tooth is identified by digitising
 the surface.
 - 4. A method according to claim 3 wherein, data produced when the surface is digitised is manipulated by one or both or producing a wax model (54) or virtual wax-up of the denture.
 - 5. A method according to claim 3 wherein, data produced when the surface is digitised is related to a near net shape version using best fit techniques.
 - 6. A method according to any preceding claim wherein, the near net shape is altered by machining.

WO 2005/077296 PCT/GB2005/000418

14

- 7. A method according to any preceding claim wherein, the near net shape version is a pre-formed sintered ceramic shell (20).
- 5 8. A method according to claim 7 wherein, the preformed sintered ceramic shell (20) comprises one of a plurality of standard tooth shapes (40) from which the most appropriate shape is chosen.
- 9. A method according to claim 7 wherein, the preformed sintered ceramic shell (20) comprises an individually produced tooth shape (42).
- 10. A method according to any of claims 7 to 9

 15 wherein, the pre-formed sintered ceramic shell (20) is made by one of single (48) or double (49) sided pressing.
- 11. A method according to claim 1 wherein, a reference 20 feature (60) is provided on both the near net shape version (50) and the preparation.
 - 12. A fixed denture manufactured according to any preceding claim.